

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-61SL-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

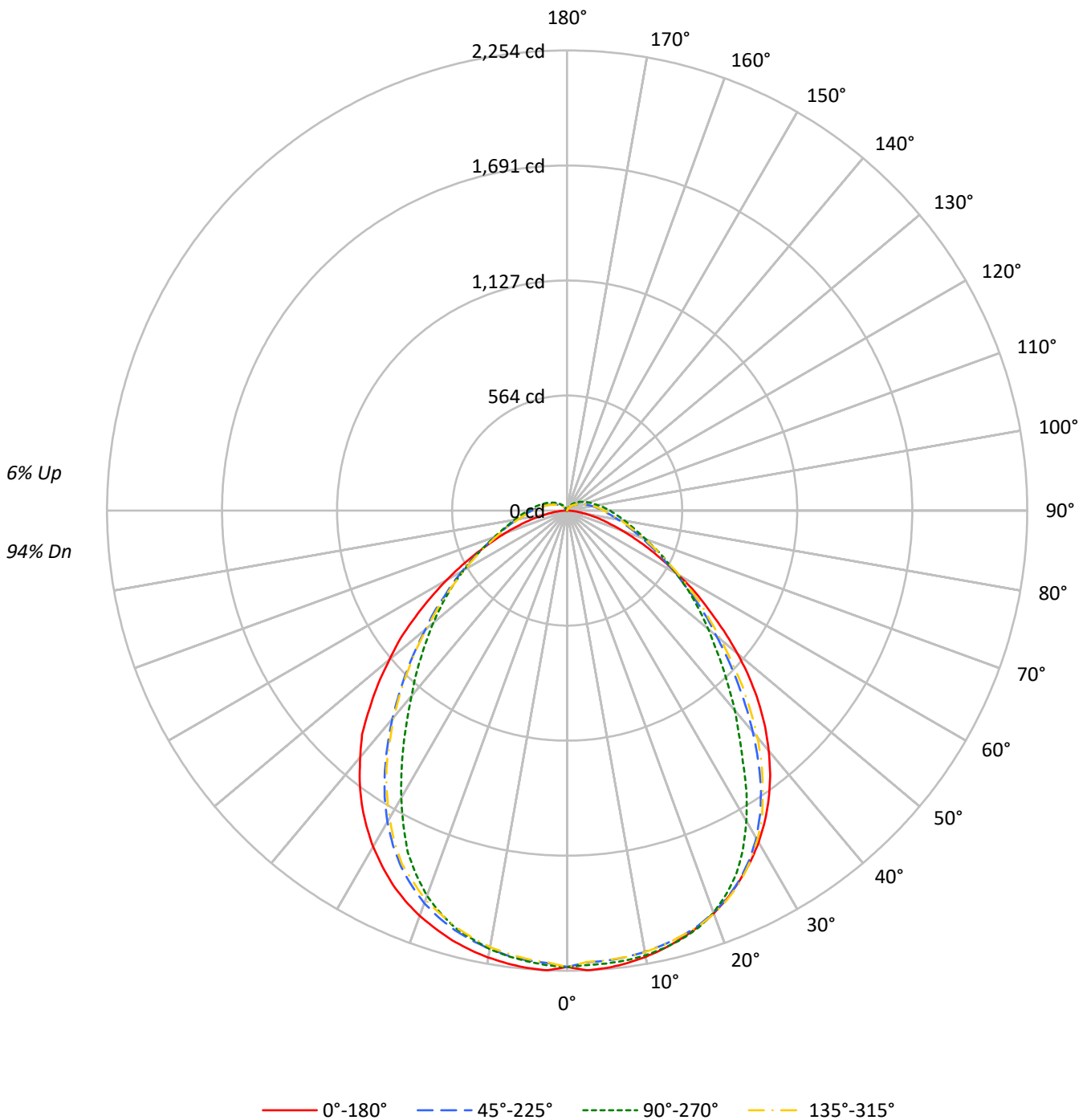
Lumens per Lamp: N/A  
Luminaire Lumens: 5657.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#  
CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79				
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67				
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28				
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	18063	18063	18063	18063
5°	18192	17488	18192	17411
10°	18111	17024	18141	16787
15°	17995	16515	18077	16086
20°	17857	15861	17962	15192
25°	17570	14891	17765	14014
30°	17198	13465	17423	12466
35°	16618	11718	16939	10912
40°	15786	10248	16204	9509
45°	14689	8909	15166	8398
50°	13188	7829	13770	7434
55°	11409	6913	12238	6563
60°	9595	6069	10463	5720
65°	7865	5367	8659	4976
70°	6260	4762	7009	4405
75°	4916	4397	5536	4046
80°	3550	4243	4178	3877
85°	2186	4267	2938	3922



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.9	3.7
10°-20°	607.7	10.7
20°-30°	900.6	15.9
30°-40°	1000.5	17.7
40°-50°	907.0	16.0
50°-60°	702.8	12.4
60°-70°	477.3	8.4
70°-80°	303.6	5.4
80°-90°	194.1	3.4
90°-100°	130.9	2.3
100°-110°	89.6	1.6
110°-120°	59.8	1.1
120°-130°	37.2	0.7
130°-140°	20.6	0.4
140°-150°	9.7	0.2
150°-160°	3.5	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1720.2	30.4
0°-40°	2720.7	48.1
0°-60°	4330.5	76.6
0°-90°	5305.5	93.8
90°-120°	280.3	5.0
90°-150°	347.7	6.1
90°-180°	352.0	6.2
0°-180°	5657.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2235	2235	2235	2235	2235	
5°	2249	2227	2249	2217	2249	214
15°	2169	2173	2179	2116	2169	612
25°	1999	1962	2021	1847	1999	921
35°	1721	1500	1755	1397	1721	1074
45°	1326	1072	1368	1011	1326	1018
55°	846	754	907	716	846	762
65°	439	507	483	470	439	440
75°	176	338	198	311	176	189
85°	32	244	43	224	32	38
90°	0	210	2	192	0	2
95°	1	180	0	167	1	1
105°	1	132	0	124	1	1
115°	1	100	0	92	1	1
125°	1	74	1	65	1	1
135°	1	52	1	42	1	1
145°	1	33	1	23	1	1
155°	1	18	1	9	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2253.8	2251.3	2248.8	2245.2	2248.8	2258.7	2252.5	2239.0	2236.5	2214.4	2224.3
5°	2248.8	2245.2	2242.7	2239.0	2243.9	2256.2	2250.1	2237.8	2234.1	2213.2	2224.3
7.5°	2236.5	2234.1	2230.4	2230.4	2235.3	2247.6	2242.7	2229.2	2226.7	2205.8	2218.1
10°	2219.3	2218.1	2215.6	2215.6	2220.6	2235.3	2229.2	2216.9	2214.4	2194.7	2208.3
12.5°	2197.2	2198.4	2194.7	2194.7	2202.1	2216.9	2212.0	2198.4	2196.0	2178.8	2192.3
15°	2168.9	2170.2	2167.7	2168.9	2176.3	2193.5	2187.4	2175.1	2172.6	2159.1	2170.2
17.5°	2137.0	2138.2	2138.2	2137.0	2145.6	2162.8	2157.9	2146.8	2143.1	2132.0	2145.6
20°	2100.1	2100.1	2100.1	2100.1	2109.9	2127.1	2121.0	2112.4	2105.0	2096.4	2107.4
22.5°	2054.6	2053.3	2054.6	2058.3	2068.1	2081.6	2077.9	2068.1	2057.0	2052.1	2060.7
25°	1999.2	2002.9	2004.2	2007.9	2020.1	2031.2	2027.5	2017.7	2000.5	1996.8	1999.2
27.5°	1941.5	1943.9	1947.6	1946.4	1963.6	1974.7	1967.3	1958.7	1934.1	1930.4	1927.9
30°	1876.3	1880.0	1882.4	1881.2	1894.7	1907.0	1899.7	1888.6	1855.4	1852.9	1833.3
32.5°	1802.5	1806.2	1808.7	1808.7	1828.3	1833.3	1819.7	1803.7	1768.1	1759.5	1742.3
35°	1721.4	1725.1	1726.3	1726.3	1746.0	1744.7	1727.5	1705.4	1666.0	1655.0	1625.5
37.5°	1634.1	1636.5	1637.8	1645.1	1653.7	1646.4	1624.2	1596.0	1566.4	1535.7	1503.7
40°	1535.7	1539.4	1541.9	1546.8	1555.4	1546.8	1514.8	1480.4	1448.4	1414.0	1382.0
42.5°	1434.9	1445.9	1443.5	1442.3	1447.2	1423.8	1399.2	1359.9	1327.9	1292.3	1260.3
45°	1325.5	1324.2	1330.4	1332.8	1331.6	1311.9	1277.5	1241.8	1209.9	1173.0	1145.9
47.5°	1209.9	1208.6	1213.6	1216.0	1208.6	1187.7	1160.7	1120.1	1093.1	1061.1	1040.2
50°	1088.1	1088.1	1095.5	1088.1	1084.5	1063.6	1041.4	1000.9	979.9	951.7	939.4
52.5°	966.4	977.5	970.1	967.7	964.0	943.1	925.8	892.7	875.4	863.1	848.4
55°	845.9	858.2	853.3	849.6	848.4	831.2	815.2	790.6	779.5	770.9	762.3
57.5°	743.9	742.6	740.2	736.5	737.7	724.2	708.2	694.7	689.8	686.1	688.5
60°	625.8	635.7	632.0	633.2	634.4	632.0	618.5	609.9	611.1	612.3	616.0
62.5°	528.7	537.3	543.5	538.5	541.0	544.7	537.3	534.9	539.8	544.7	549.6
65°	438.9	447.6	453.7	452.5	459.9	467.2	466.0	468.5	479.5	485.7	491.8
67.5°	357.8	366.4	375.0	376.2	387.3	398.4	403.3	411.9	424.2	432.8	440.2
70°	287.7	295.1	304.9	311.1	325.8	340.6	349.2	366.4	373.8	386.1	391.0
72.5°	225.0	231.2	244.7	259.4	271.7	290.2	307.4	322.1	333.2	346.7	352.9
75°	175.8	178.3	193.0	210.3	227.5	248.4	266.8	282.8	297.6	311.1	320.9
77.5°	129.1	132.8	146.3	169.7	189.4	211.5	232.4	249.6	265.6	279.1	292.6
80°	89.8	97.1	111.9	135.3	157.4	182.0	201.6	221.3	238.5	252.1	265.6
82.5°	57.8	63.9	84.8	108.2	131.6	156.2	177.1	196.7	215.2	229.9	242.2
85°	32.0	40.6	61.5	86.1	109.4	134.0	156.2	175.8	194.3	207.8	220.1
87.5°	12.3	24.6	44.3	67.6	91.0	114.3	137.7	156.2	174.6	189.4	200.4
90°	0.0	14.8	33.2	56.6	79.9	103.3	125.4	145.1	162.3	175.8	188.1
92.5°	1.2	9.8	25.8	45.5	67.6	89.8	110.7	130.3	147.5	161.1	172.1
95°	1.2	7.4	20.9	39.3	59.0	79.9	99.6	118.0	134.0	147.5	158.6
97.5°	1.2	4.9	17.2	34.4	51.6	72.5	91.0	108.2	123.0	136.5	145.1
100°	1.2	4.9	14.8	29.5	46.7	65.2	82.4	99.6	113.1	124.2	134.0
102.5°	1.2	3.7	12.3	25.8	41.8	57.8	75.0	91.0	103.3	114.3	124.2
105°	1.2	3.7	11.1	22.1	36.9	52.9	67.6	82.4	95.9	105.7	114.3
107.5°	1.2	2.5	9.8	18.4	32.0	48.0	62.7	75.0	87.3	97.1	105.7
110°	1.2	2.5	8.6	17.2	28.3	43.0	56.6	68.9	79.9	89.8	97.1



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CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.2	2.5	7.4	16.0	25.8	38.1	51.6	62.7	73.8	82.4	89.8
115°	1.2	2.5	7.4	14.8	23.4	33.2	45.5	57.8	66.4	76.2	82.4
117.5°	1.2	2.5	6.1	12.3	22.1	30.7	41.8	51.6	61.5	70.1	76.2
120°	1.2	2.5	6.1	11.1	19.7	28.3	36.9	46.7	56.6	62.7	68.9
122.5°	1.2	2.5	4.9	11.1	17.2	25.8	33.2	41.8	50.4	57.8	63.9
125°	1.2	2.5	4.9	9.8	16.0	23.4	30.7	36.9	45.5	51.6	57.8
127.5°	1.2	2.5	4.9	8.6	14.8	20.9	28.3	34.4	40.6	46.7	51.6
130°	1.2	2.5	3.7	7.4	13.5	18.4	24.6	32.0	36.9	41.8	46.7
132.5°	1.2	2.5	3.7	7.4	11.1	16.0	22.1	28.3	33.2	38.1	41.8
135°	1.2	2.5	3.7	6.1	9.8	14.8	18.4	24.6	29.5	34.4	38.1
137.5°	1.2	2.5	3.7	6.1	8.6	12.3	16.0	20.9	25.8	29.5	34.4
140°	1.2	2.5	3.7	4.9	7.4	11.1	14.8	17.2	22.1	25.8	29.5
142.5°	1.2	2.5	3.7	4.9	7.4	9.8	12.3	14.8	18.4	22.1	25.8
145°	1.2	2.5	3.7	4.9	6.1	8.6	11.1	13.5	14.8	18.4	20.9
147.5°	1.2	2.5	3.7	4.9	4.9	7.4	9.8	11.1	13.5	14.8	17.2
150°	1.2	2.5	3.7	3.7	4.9	6.1	8.6	9.8	11.1	13.5	14.8
152.5°	1.2	2.5	3.7	3.7	4.9	6.1	7.4	8.6	9.8	11.1	12.3
155°	1.2	2.5	3.7	3.7	3.7	4.9	6.1	7.4	8.6	9.8	11.1
157.5°	2.5	2.5	2.5	3.7	3.7	4.9	4.9	6.1	7.4	7.4	8.6
160°	2.5	2.5	2.5	3.7	3.7	3.7	4.9	4.9	6.1	6.1	7.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2221.8	2225.5	2236.5	2236.5	2234.1	2231.6	2231.6	2227.9	2230.4	2235.3	2232.9
5°	2221.8	2225.5	2236.5	2236.5	2234.1	2231.6	2230.4	2226.7	2230.4	2235.3	2232.9
7.5°	2214.4	2219.3	2230.4	2230.4	2227.9	2226.7	2224.3	2221.8	2225.5	2230.4	2227.9
10°	2204.6	2209.5	2220.6	2220.6	2218.1	2218.1	2214.4	2212.0	2216.9	2220.6	2219.3
12.5°	2189.8	2196.0	2205.8	2204.6	2202.1	2203.3	2199.7	2194.7	2199.7	2203.3	2204.6
15°	2168.9	2176.3	2186.1	2183.7	2180.0	2182.4	2176.3	2172.6	2176.3	2183.7	2182.4
17.5°	2141.9	2146.8	2154.2	2154.2	2150.5	2148.0	2145.6	2141.9	2144.3	2149.2	2150.5
20°	2103.8	2109.9	2113.6	2109.9	2108.7	2105.0	2100.1	2096.4	2101.3	2108.7	2109.9
22.5°	2053.3	2054.6	2063.2	2054.6	2048.4	2047.2	2042.3	2034.9	2042.3	2048.4	2049.7
25°	1990.6	1996.8	1993.1	1978.3	1978.3	1968.5	1966.0	1962.4	1963.6	1974.7	1979.6
27.5°	1910.7	1913.2	1903.3	1891.0	1880.0	1873.8	1865.2	1866.5	1866.5	1881.2	1886.1
30°	1823.4	1809.9	1801.3	1781.6	1773.0	1758.3	1755.8	1755.8	1753.3	1760.7	1782.8
32.5°	1718.9	1700.5	1686.9	1668.5	1653.7	1639.0	1631.6	1635.3	1634.1	1652.5	1659.9
35°	1604.6	1593.5	1565.2	1541.9	1533.2	1511.1	1511.1	1500.0	1507.4	1528.3	1536.9
37.5°	1484.1	1466.9	1443.5	1417.7	1411.5	1394.3	1388.2	1382.0	1398.0	1401.7	1410.3
40°	1361.1	1345.1	1323.0	1298.4	1298.4	1277.5	1277.5	1277.5	1278.7	1286.1	1302.1
42.5°	1244.3	1227.1	1207.4	1190.2	1187.7	1171.8	1171.8	1170.5	1173.0	1179.1	1193.9
45°	1131.2	1117.7	1096.8	1088.1	1089.4	1072.2	1075.9	1072.2	1077.1	1083.2	1088.1
47.5°	1026.7	1018.1	1009.5	997.2	993.5	992.2	986.1	981.2	989.8	989.8	997.2
50°	929.5	924.6	919.7	912.3	913.6	908.6	901.3	901.3	907.4	908.6	913.6
52.5°	844.7	838.6	832.4	833.6	834.9	832.4	828.7	825.0	828.7	831.2	837.3
55°	759.9	754.9	761.1	758.6	761.1	758.6	756.2	753.7	759.9	756.2	762.3
57.5°	683.6	688.5	691.0	686.1	689.8	687.3	688.5	684.9	689.8	692.2	691.0
60°	613.5	620.9	617.2	618.5	623.4	620.9	616.0	619.7	624.6	625.8	624.6
62.5°	549.6	558.2	561.9	559.4	560.7	558.2	561.9	557.0	563.1	565.6	561.9
65°	491.8	501.7	504.1	504.1	504.1	501.7	505.3	506.6	509.0	509.0	506.6
67.5°	442.6	451.2	453.7	456.2	453.7	451.2	451.2	452.5	457.4	459.9	457.4
70°	398.4	407.0	408.2	408.2	409.4	411.9	407.0	409.4	413.1	414.4	413.1
72.5°	360.3	368.9	371.3	370.1	371.3	372.6	372.6	370.1	373.8	376.2	376.2
75°	329.5	334.4	336.9	336.9	338.1	339.4	339.4	338.1	340.6	341.8	343.0
77.5°	301.2	304.9	308.6	308.6	309.8	308.6	311.1	311.1	312.3	313.5	314.8
80°	273.0	277.9	280.3	281.6	284.0	285.3	285.3	285.3	286.5	287.7	287.7
82.5°	250.8	254.5	258.2	261.9	261.9	263.1	263.1	263.1	264.4	264.4	265.6
85°	228.7	233.6	237.3	239.8	241.0	242.2	242.2	243.5	243.5	243.5	244.7
87.5°	209.0	215.2	217.6	220.1	221.3	223.8	223.8	223.8	225.0	225.0	225.0
90°	195.5	201.6	204.1	206.6	207.8	209.0	209.0	210.3	210.3	211.5	211.5
92.5°	179.5	185.7	190.6	190.6	191.8	194.3	193.0	193.0	194.3	195.5	195.5
95°	167.2	172.1	175.8	177.1	178.3	178.3	178.3	179.5	178.3	179.5	179.5
97.5°	152.5	157.4	161.1	163.5	164.8	164.8	164.8	166.0	164.8	166.0	166.0
100°	140.2	145.1	148.8	150.0	152.5	152.5	152.5	152.5	152.5	152.5	153.7
102.5°	130.3	135.3	137.7	138.9	140.2	141.4	141.4	141.4	141.4	142.6	142.6
105°	120.5	125.4	127.9	129.1	130.3	131.6	131.6	131.6	132.8	132.8	131.6
107.5°	111.9	115.6	118.0	120.5	121.7	121.7	123.0	123.0	123.0	123.0	123.0
110°	103.3	107.0	110.7	113.1	113.1	114.3	114.3	115.6	115.6	114.3	115.6





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	94.7	99.6	102.1	104.5	105.7	107.0	107.0	107.0	107.0	107.0	107.0
115°	87.3	92.2	94.7	97.1	98.4	99.6	99.6	99.6	99.6	99.6	99.6
117.5°	81.2	86.1	88.5	89.8	91.0	92.2	93.4	93.4	93.4	93.4	92.2
120°	75.0	78.7	81.2	83.6	84.8	86.1	86.1	86.1	86.1	86.1	86.1
122.5°	68.9	72.5	75.0	77.5	78.7	79.9	79.9	79.9	79.9	79.9	79.9
125°	62.7	66.4	68.9	71.3	72.5	73.8	73.8	73.8	73.8	73.8	73.8
127.5°	56.6	60.2	63.9	65.2	66.4	67.6	67.6	67.6	68.9	67.6	67.6
130°	50.4	54.1	57.8	59.0	60.2	61.5	62.7	62.7	62.7	62.7	61.5
132.5°	45.5	49.2	51.6	52.9	55.3	55.3	56.6	56.6	56.6	56.6	55.3
135°	41.8	44.3	46.7	48.0	50.4	50.4	50.4	51.6	51.6	50.4	49.2
137.5°	36.9	39.3	41.8	43.0	44.3	45.5	45.5	46.7	45.5	45.5	45.5
140°	34.4	35.7	38.1	39.3	40.6	40.6	40.6	41.8	41.8	40.6	40.6
142.5°	29.5	32.0	34.4	35.7	36.9	36.9	36.9	36.9	36.9	36.9	36.9
145°	24.6	28.3	29.5	32.0	32.0	33.2	33.2	33.2	33.2	33.2	32.0
147.5°	20.9	23.4	27.1	28.3	28.3	29.5	29.5	29.5	29.5	29.5	28.3
150°	16.0	18.4	22.1	24.6	24.6	25.8	25.8	25.8	25.8	24.6	24.6
152.5°	13.5	16.0	17.2	19.7	20.9	20.9	20.9	22.1	20.9	20.9	20.9
155°	12.3	13.5	14.8	16.0	17.2	18.4	18.4	18.4	18.4	17.2	17.2
157.5°	9.8	11.1	12.3	13.5	14.8	16.0	16.0	16.0	16.0	16.0	14.8
160°	7.4	8.6	9.8	9.8	11.1	12.3	13.5	12.3	12.3	12.3	12.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2230.4	2229.2	2232.9	2226.7	2208.3	2213.2	2210.7	2221.8	2224.3	2226.7	2237.8
5°	2230.4	2229.2	2231.6	2226.7	2207.0	2210.7	2208.3	2219.3	2221.8	2223.0	2234.1
7.5°	2225.5	2224.3	2227.9	2221.8	2200.9	2205.8	2202.1	2213.2	2214.4	2215.6	2225.5
10°	2215.6	2214.4	2216.9	2212.0	2191.1	2196.0	2191.1	2202.1	2202.1	2204.6	2212.0
12.5°	2200.9	2198.4	2203.3	2197.2	2173.8	2180.0	2177.5	2184.9	2186.1	2187.4	2194.7
15°	2180.0	2177.5	2181.2	2177.5	2156.6	2157.9	2154.2	2165.2	2166.5	2164.0	2171.4
17.5°	2149.2	2146.8	2154.2	2151.7	2130.8	2135.7	2134.5	2137.0	2140.6	2134.5	2144.3
20°	2111.1	2113.6	2116.1	2117.3	2101.3	2101.3	2100.1	2105.0	2108.7	2103.8	2111.1
22.5°	2054.6	2060.7	2068.1	2070.6	2059.5	2058.3	2065.6	2063.2	2066.9	2064.4	2069.3
25°	1983.3	1995.6	2002.9	2010.3	2004.2	2006.6	2017.7	2020.1	2020.1	2018.9	2023.8
27.5°	1894.7	1910.7	1924.2	1940.2	1934.1	1939.0	1957.4	1959.9	1964.8	1959.9	1969.7
30°	1789.0	1803.7	1829.6	1852.9	1855.4	1862.8	1888.6	1891.0	1904.6	1899.7	1903.3
32.5°	1683.3	1690.6	1720.1	1743.5	1758.3	1776.7	1805.0	1809.9	1828.3	1832.0	1832.0
35°	1550.5	1571.4	1598.4	1631.6	1650.1	1669.7	1707.8	1715.2	1742.3	1750.9	1760.7
37.5°	1438.6	1458.2	1475.5	1509.9	1543.1	1565.2	1596.0	1614.4	1642.7	1658.7	1671.0
40°	1319.3	1335.3	1353.7	1388.2	1416.4	1449.6	1480.4	1502.5	1538.2	1556.6	1572.6
42.5°	1206.2	1218.5	1238.2	1262.7	1292.3	1329.1	1358.6	1384.5	1422.6	1448.4	1466.9
45°	1105.4	1112.7	1130.0	1148.4	1174.2	1212.3	1240.6	1273.8	1304.5	1331.6	1353.7
47.5°	1010.7	1020.5	1029.1	1041.4	1064.8	1088.1	1121.3	1153.3	1184.1	1213.6	1235.7
50°	923.4	923.4	936.9	945.5	961.5	982.4	1008.2	1030.4	1068.5	1089.4	1117.7
52.5°	838.6	843.5	850.8	855.8	868.1	881.6	902.5	920.9	952.9	972.6	999.6
55°	763.5	768.5	772.2	774.6	782.0	798.0	805.4	820.1	842.2	858.2	881.6
57.5°	692.2	694.7	698.4	699.6	700.8	710.7	716.8	720.5	742.6	758.6	778.3
60°	627.1	627.1	630.8	629.5	628.3	633.2	632.0	635.7	649.2	659.0	667.6
62.5°	565.6	565.6	566.8	564.4	563.1	563.1	558.2	561.9	565.6	566.8	573.0
65°	509.0	515.2	510.3	511.5	504.1	501.7	499.2	491.8	490.6	485.7	488.1
67.5°	458.6	463.5	458.6	458.6	452.5	447.6	441.4	429.1	425.4	415.6	413.1
70°	418.0	414.4	416.8	413.1	405.8	399.6	391.0	381.2	368.9	356.6	348.0
72.5°	378.7	378.7	376.2	372.6	368.9	356.6	346.7	335.7	320.9	304.9	292.6
75°	340.6	341.8	341.8	338.1	332.0	320.9	309.8	293.9	277.9	259.4	243.5
77.5°	313.5	313.5	313.5	307.4	301.2	291.4	277.9	260.7	243.5	221.3	202.9
80°	287.7	286.5	286.5	279.1	273.0	261.9	248.4	231.2	212.7	189.4	168.4
82.5°	266.8	265.6	263.1	257.0	248.4	237.3	223.8	205.3	185.7	164.8	138.9
85°	244.7	243.5	241.0	234.8	226.2	216.4	201.6	183.2	163.5	140.2	115.6
87.5°	225.0	223.8	220.1	216.4	206.6	195.5	180.7	163.5	142.6	120.5	95.9
90°	211.5	209.0	206.6	201.6	193.0	180.7	166.0	147.5	126.6	104.5	79.9
92.5°	195.5	194.3	190.6	185.7	178.3	166.0	151.2	134.0	113.1	92.2	68.9
95°	179.5	178.3	175.8	170.9	163.5	152.5	138.9	121.7	102.1	81.2	60.2
97.5°	164.8	164.8	161.1	157.4	148.8	140.2	126.6	110.7	92.2	73.8	54.1
100°	152.5	152.5	148.8	143.9	137.7	129.1	115.6	100.8	83.6	66.4	46.7
102.5°	141.4	140.2	137.7	132.8	126.6	118.0	105.7	92.2	76.2	59.0	41.8
105°	131.6	130.3	127.9	123.0	118.0	108.2	98.4	84.8	68.9	52.9	36.9
107.5°	121.7	120.5	119.3	114.3	108.2	99.6	89.8	76.2	62.7	48.0	33.2
110°	113.1	111.9	109.4	104.5	98.4	91.0	81.2	70.1	56.6	43.0	29.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	105.7	104.5	102.1	97.1	92.2	83.6	75.0	62.7	51.6	39.3	25.8
115°	98.4	97.1	94.7	89.8	83.6	76.2	67.6	57.8	45.5	34.4	23.4
117.5°	91.0	89.8	87.3	83.6	77.5	70.1	61.5	51.6	40.6	32.0	20.9
120°	84.8	82.4	79.9	76.2	70.1	63.9	55.3	46.7	36.9	28.3	18.4
122.5°	78.7	76.2	73.8	70.1	63.9	57.8	49.2	41.8	34.4	25.8	17.2
125°	71.3	70.1	67.6	63.9	57.8	51.6	45.5	38.1	30.7	23.4	14.8
127.5°	65.2	63.9	61.5	56.6	51.6	46.7	40.6	34.4	27.1	19.7	13.5
130°	60.2	57.8	55.3	51.6	48.0	43.0	36.9	30.7	24.6	17.2	12.3
132.5°	54.1	51.6	49.2	46.7	43.0	38.1	33.2	27.1	22.1	16.0	11.1
135°	49.2	46.7	44.3	41.8	38.1	34.4	29.5	24.6	19.7	14.8	9.8
137.5°	43.0	41.8	40.6	38.1	34.4	30.7	27.1	20.9	17.2	13.5	8.6
140°	39.3	38.1	36.9	33.2	30.7	27.1	23.4	18.4	14.8	11.1	7.4
142.5°	35.7	34.4	32.0	29.5	27.1	24.6	19.7	17.2	13.5	9.8	7.4
145°	30.7	29.5	28.3	25.8	23.4	19.7	17.2	14.8	12.3	8.6	6.1
147.5°	28.3	27.1	24.6	22.1	19.7	17.2	16.0	13.5	9.8	7.4	4.9
150°	23.4	22.1	20.9	18.4	17.2	16.0	13.5	11.1	8.6	6.1	4.9
152.5°	19.7	18.4	17.2	17.2	14.8	13.5	11.1	9.8	7.4	6.1	3.7
155°	17.2	17.2	16.0	14.8	12.3	11.1	9.8	7.4	6.1	4.9	3.7
157.5°	14.8	13.5	12.3	12.3	11.1	9.8	7.4	6.1	4.9	4.9	3.7
160°	12.3	11.1	11.1	9.8	8.6	7.4	6.1	6.1	4.9	3.7	3.7
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2239.0	2225.5	2237.8	2253.8	2253.8	2251.3	2248.8	2253.8	2266.1	2261.1	2246.4
5°	2235.3	2221.8	2232.9	2248.8	2248.8	2245.2	2242.7	2246.4	2259.9	2253.8	2240.2
7.5°	2227.9	2215.6	2223.0	2237.8	2237.8	2234.1	2231.6	2236.5	2247.6	2241.5	2226.7
10°	2214.4	2200.9	2209.5	2223.0	2221.8	2219.3	2215.6	2221.8	2231.6	2223.0	2205.8
12.5°	2197.2	2183.7	2191.1	2203.3	2202.1	2197.2	2194.7	2198.4	2207.0	2202.1	2183.7
15°	2173.8	2160.3	2166.5	2178.8	2175.1	2171.4	2166.5	2167.7	2178.8	2170.2	2150.5
17.5°	2145.6	2130.8	2135.7	2146.8	2143.1	2139.4	2133.3	2134.5	2146.8	2134.5	2113.6
20°	2111.1	2095.1	2098.8	2112.4	2106.2	2100.1	2093.9	2093.9	2106.2	2092.7	2069.3
22.5°	2074.2	2058.3	2060.7	2070.6	2065.6	2054.6	2048.4	2052.1	2058.3	2041.0	2016.5
25°	2028.8	2007.9	2011.5	2021.4	2017.7	2002.9	1996.8	1999.2	1996.8	1983.3	1957.4
27.5°	1975.9	1953.8	1956.2	1962.4	1957.4	1943.9	1936.5	1937.8	1932.8	1915.6	1886.1
30°	1909.5	1898.4	1897.2	1900.9	1893.5	1880.0	1871.4	1868.9	1867.7	1843.1	1807.4
32.5°	1841.9	1832.0	1825.9	1830.8	1822.2	1808.7	1793.9	1793.9	1781.6	1758.3	1727.5
35°	1773.0	1757.0	1750.9	1754.6	1744.7	1727.5	1715.2	1709.1	1690.6	1661.1	1627.9
37.5°	1684.5	1673.4	1666.0	1669.7	1658.7	1646.4	1623.0	1616.9	1597.2	1556.6	1514.8
40°	1588.6	1580.0	1572.6	1576.3	1564.0	1545.5	1524.6	1514.8	1492.7	1447.2	1414.0
42.5°	1485.3	1481.6	1473.0	1486.5	1461.9	1443.5	1422.6	1406.6	1384.5	1335.3	1297.2
45°	1375.9	1384.5	1364.8	1368.5	1352.5	1336.5	1314.4	1291.0	1268.9	1222.2	1179.1
47.5°	1260.3	1266.4	1252.9	1255.4	1238.2	1223.4	1203.7	1174.2	1149.6	1109.1	1070.9
50°	1141.0	1138.6	1138.6	1136.1	1122.6	1104.1	1084.5	1057.4	1032.8	995.9	964.0
52.5°	1014.4	1019.3	1021.8	1027.9	1010.7	999.6	968.9	945.5	927.1	889.0	861.9
55°	892.7	909.9	904.9	907.4	887.7	879.1	854.5	836.1	809.0	786.9	769.7
57.5°	782.0	785.7	788.1	791.8	783.2	766.0	746.3	731.6	710.7	692.2	679.9
60°	675.0	675.0	676.3	682.4	673.8	659.0	644.3	633.2	618.5	607.4	600.0
62.5°	574.2	582.8	584.0	579.1	568.1	560.7	550.8	544.7	534.9	531.2	528.7
65°	480.8	480.8	480.8	483.2	477.1	472.1	466.0	464.8	468.5	463.5	466.0
67.5°	402.1	398.4	395.9	397.1	394.7	392.2	391.0	394.7	402.1	402.1	408.2
70°	334.4	327.1	322.1	322.1	322.1	323.4	327.1	334.4	346.7	351.7	360.3
72.5°	279.1	263.1	255.7	255.7	257.0	261.9	273.0	286.5	297.6	307.4	318.5
75°	226.2	210.3	199.2	198.0	200.4	207.8	223.8	236.1	254.5	268.0	281.6
77.5°	183.2	163.5	150.0	148.8	152.5	163.5	183.2	199.2	220.1	234.8	249.6
80°	146.3	124.2	113.1	105.7	111.9	125.4	147.5	167.2	186.9	206.6	225.0
82.5°	116.8	95.9	78.7	71.3	78.7	97.1	118.0	141.4	161.1	182.0	200.4
85°	92.2	70.1	50.4	43.0	51.6	71.3	94.7	118.0	140.2	161.1	179.5
87.5°	72.5	50.4	30.7	20.9	32.0	52.9	75.0	98.4	121.7	142.6	161.1
90°	56.6	35.7	17.2	2.5	18.4	38.1	60.2	82.4	105.7	126.6	145.1
92.5°	48.0	27.1	9.8	0.0	11.1	28.3	49.2	71.3	92.2	113.1	131.6
95°	40.6	22.1	7.4	0.0	7.4	22.1	40.6	60.2	81.2	102.1	120.5
97.5°	34.4	17.2	4.9	0.0	4.9	17.2	33.2	52.9	71.3	91.0	108.2
100°	29.5	14.8	3.7	0.0	3.7	13.5	28.3	45.5	63.9	82.4	98.4
102.5°	25.8	12.3	2.5	0.0	2.5	11.1	23.4	39.3	55.3	72.5	88.5
105°	22.1	9.8	2.5	0.0	1.2	8.6	19.7	34.4	49.2	65.2	79.9
107.5°	19.7	8.6	2.5	0.0	1.2	7.4	17.2	29.5	44.3	57.8	71.3
110°	17.2	7.4	2.5	0.0	1.2	4.9	14.8	25.8	38.1	51.6	65.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	14.8	6.1	1.2	0.0	0.0	3.7	12.3	22.1	33.2	46.7	57.8
115°	13.5	6.1	1.2	0.0	0.0	2.5	9.8	19.7	29.5	41.8	51.6
117.5°	12.3	4.9	1.2	0.0	1.2	2.5	8.6	17.2	25.8	35.7	46.7
120°	11.1	4.9	1.2	0.0	1.2	1.2	6.1	14.8	22.1	32.0	40.6
122.5°	9.8	4.9	1.2	0.0	1.2	1.2	4.9	12.3	19.7	28.3	35.7
125°	8.6	3.7	2.5	1.2	1.2	1.2	3.7	9.8	17.2	23.4	32.0
127.5°	8.6	3.7	2.5	1.2	1.2	1.2	2.5	8.6	13.5	20.9	28.3
130°	7.4	3.7	2.5	1.2	1.2	1.2	1.2	6.1	12.3	17.2	23.4
132.5°	6.1	3.7	2.5	1.2	1.2	1.2	1.2	3.7	8.6	14.8	19.7
135°	6.1	3.7	2.5	1.2	1.2	1.2	1.2	2.5	6.1	11.1	16.0
137.5°	4.9	2.5	2.5	1.2	1.2	1.2	1.2	1.2	4.9	8.6	12.3
140°	4.9	2.5	2.5	1.2	1.2	1.2	1.2	1.2	3.7	6.1	9.8
142.5°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	2.5	4.9	7.4
145°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	2.5	4.9
147.5°	3.7	3.7	2.5	1.2	1.2	1.2	1.2	1.2	1.2	2.5	3.7
150°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5
152.5°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5
155°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	2.5	2.5
157.5°	3.7	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5
160°	3.7	2.5	2.5	1.2	2.5	1.2	2.5	2.5	2.5	2.5	2.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2241.5	2218.1	2230.4	2226.7	2231.6	2241.5	2240.2	2237.8	2237.8	2234.1	2229.2
5°	2234.1	2212.0	2223.0	2216.9	2223.0	2231.6	2230.4	2226.7	2229.2	2223.0	2216.9
7.5°	2219.3	2199.7	2209.5	2204.6	2209.5	2218.1	2214.4	2213.2	2215.6	2205.8	2202.1
10°	2202.1	2180.0	2191.1	2184.9	2191.1	2197.2	2194.7	2189.8	2194.7	2184.9	2181.2
12.5°	2175.1	2156.6	2164.0	2161.5	2165.2	2171.4	2166.5	2162.8	2165.2	2156.6	2149.2
15°	2145.6	2127.1	2133.3	2129.6	2132.0	2139.4	2130.8	2129.6	2127.1	2118.5	2116.1
17.5°	2107.4	2090.2	2096.4	2090.2	2093.9	2091.5	2090.2	2084.1	2084.1	2074.2	2066.9
20°	2060.7	2046.0	2042.3	2037.4	2042.3	2037.4	2030.0	2025.1	2023.8	2014.0	2007.9
22.5°	2006.6	1989.4	1991.9	1978.3	1979.6	1972.2	1959.9	1955.0	1950.1	1939.0	1930.4
25°	1941.5	1924.2	1911.9	1903.3	1892.3	1891.0	1875.1	1862.8	1861.5	1848.0	1846.8
27.5°	1867.7	1848.0	1838.2	1817.3	1803.7	1792.7	1779.2	1766.9	1760.7	1746.0	1736.1
30°	1782.8	1760.7	1736.1	1721.4	1700.5	1691.9	1668.5	1653.7	1648.8	1632.8	1625.5
32.5°	1686.9	1663.6	1643.9	1615.6	1592.3	1580.0	1556.6	1541.9	1535.7	1518.5	1508.7
35°	1582.4	1556.6	1533.2	1506.2	1487.8	1466.9	1438.6	1423.8	1410.3	1404.1	1396.8
37.5°	1473.0	1444.7	1417.7	1390.6	1374.6	1350.0	1325.5	1315.6	1299.6	1293.5	1286.1
40°	1359.9	1331.6	1305.8	1280.0	1261.5	1239.4	1217.3	1213.6	1196.3	1190.2	1185.3
42.5°	1248.0	1218.5	1189.0	1170.5	1157.0	1134.9	1120.1	1116.4	1101.7	1098.0	1098.0
45°	1147.2	1110.3	1085.7	1069.7	1058.6	1040.2	1027.9	1025.4	1013.1	1010.7	1010.7
47.5°	1039.0	1004.5	986.1	976.3	966.4	952.9	945.5	945.5	933.2	930.8	929.5
50°	938.1	906.2	892.7	882.8	881.6	871.7	865.6	863.1	863.1	854.5	855.8
52.5°	842.2	826.3	815.2	809.0	801.7	795.5	790.6	790.6	786.9	780.8	783.2
55°	753.7	735.3	736.5	731.6	727.9	724.2	725.4	718.1	716.8	711.9	715.6
57.5°	665.2	665.2	662.7	659.0	652.9	655.3	655.3	655.3	649.2	645.5	649.2
60°	590.2	593.9	587.7	591.4	589.0	590.2	587.7	587.7	584.0	582.8	584.0
62.5°	523.8	529.9	527.5	532.4	529.9	531.2	533.6	528.7	526.2	523.8	526.2
65°	464.8	472.1	470.9	474.6	475.8	477.1	478.3	475.8	473.4	470.9	469.7
67.5°	413.1	420.5	425.4	426.7	427.9	431.6	430.3	427.9	425.4	421.7	420.5
70°	366.4	376.2	382.4	384.8	389.8	387.3	387.3	386.1	383.6	379.9	378.7
72.5°	327.1	338.1	344.3	346.7	351.7	351.7	350.4	349.2	346.7	343.0	341.8
75°	292.6	302.5	311.1	316.0	319.7	319.7	318.5	317.2	314.8	312.3	311.1
77.5°	265.6	274.2	281.6	287.7	290.2	291.4	290.2	287.7	287.7	286.5	285.3
80°	238.5	248.4	255.7	261.9	265.6	265.6	264.4	265.6	263.1	261.9	260.7
82.5°	215.2	226.2	234.8	241.0	243.5	244.7	243.5	244.7	242.2	242.2	242.2
85°	194.3	205.3	215.2	220.1	223.8	225.0	225.0	225.0	223.8	223.8	223.8
87.5°	177.1	188.1	198.0	202.9	206.6	207.8	207.8	209.0	206.6	206.6	206.6
90°	161.1	172.1	182.0	186.9	190.6	193.0	193.0	194.3	193.0	191.8	191.8
92.5°	146.3	158.6	168.4	173.4	177.1	180.7	180.7	182.0	179.5	179.5	179.5
95°	134.0	146.3	154.9	161.1	164.8	167.2	168.4	168.4	167.2	167.2	167.2
97.5°	123.0	134.0	142.6	148.8	152.5	153.7	154.9	156.2	154.9	154.9	154.9
100°	111.9	123.0	131.6	136.5	141.4	142.6	143.9	145.1	145.1	143.9	143.9
102.5°	102.1	113.1	120.5	126.6	130.3	132.8	134.0	134.0	134.0	134.0	134.0
105°	92.2	103.3	110.7	116.8	120.5	123.0	124.2	125.4	125.4	124.2	124.2
107.5°	83.6	93.4	102.1	107.0	111.9	114.3	115.6	115.6	116.8	115.6	115.6
110°	75.0	86.1	93.4	98.4	103.3	105.7	107.0	108.2	108.2	108.2	108.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	68.9	77.5	84.8	89.8	94.7	97.1	98.4	99.6	100.8	99.6	99.6
115°	61.5	70.1	77.5	82.4	86.1	88.5	91.0	92.2	92.2	93.4	92.2
117.5°	55.3	62.7	70.1	75.0	78.7	82.4	83.6	84.8	86.1	84.8	84.8
120°	49.2	56.6	62.7	67.6	71.3	75.0	76.2	77.5	78.7	77.5	77.5
122.5°	44.3	50.4	56.6	61.5	65.2	67.6	70.1	70.1	71.3	71.3	71.3
125°	39.3	45.5	50.4	55.3	59.0	61.5	62.7	63.9	63.9	65.2	65.2
127.5°	34.4	39.3	45.5	49.2	52.9	55.3	56.6	57.8	57.8	59.0	59.0
130°	29.5	34.4	39.3	43.0	46.7	49.2	50.4	51.6	52.9	52.9	52.9
132.5°	25.8	30.7	34.4	38.1	40.6	43.0	45.5	46.7	46.7	46.7	46.7
135°	20.9	25.8	29.5	33.2	35.7	38.1	39.3	41.8	41.8	41.8	41.8
137.5°	17.2	22.1	25.8	28.3	30.7	33.2	34.4	35.7	36.9	36.9	36.9
140°	13.5	17.2	20.9	24.6	27.1	28.3	30.7	30.7	32.0	32.0	32.0
142.5°	9.8	13.5	16.0	19.7	22.1	24.6	25.8	27.1	27.1	27.1	27.1
145°	7.4	9.8	12.3	14.8	18.4	19.7	20.9	22.1	23.4	23.4	23.4
147.5°	4.9	7.4	8.6	11.1	13.5	16.0	17.2	18.4	19.7	19.7	19.7
150°	3.7	4.9	7.4	8.6	9.8	12.3	14.8	14.8	16.0	16.0	14.8
152.5°	2.5	3.7	4.9	6.1	7.4	8.6	11.1	11.1	12.3	12.3	12.3
155°	2.5	2.5	2.5	3.7	4.9	6.1	7.4	8.6	8.6	8.6	8.6
157.5°	2.5	2.5	2.5	2.5	2.5	3.7	4.9	6.1	6.1	6.1	6.1
160°	2.5	2.5	1.2	1.2	2.5	2.5	2.5	2.5	3.7	3.7	3.7
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2232.9	2235.3	2235.3	2232.9	2231.6	2236.5	2230.4	2207.0	2214.4	2216.9	2224.3
5°	2221.8	2224.3	2224.3	2224.3	2221.8	2226.7	2220.6	2197.2	2205.8	2209.5	2214.4
7.5°	2205.8	2207.0	2209.5	2208.3	2205.8	2213.2	2207.0	2183.7	2189.8	2196.0	2202.1
10°	2184.9	2184.9	2186.1	2188.6	2186.1	2192.3	2186.1	2165.2	2171.4	2175.1	2182.4
12.5°	2156.6	2159.1	2160.3	2159.1	2157.9	2162.8	2160.3	2140.6	2143.1	2150.5	2157.9
15°	2118.5	2118.5	2124.7	2122.2	2122.2	2127.1	2129.6	2107.4	2111.1	2122.2	2129.6
17.5°	2071.8	2073.0	2077.9	2080.4	2079.2	2087.8	2089.0	2071.8	2070.6	2084.1	2091.5
20°	2011.5	2014.0	2020.1	2025.1	2025.1	2034.9	2038.6	2027.5	2028.8	2043.5	2046.0
22.5°	1937.8	1937.8	1948.8	1956.2	1962.4	1968.5	1979.6	1969.7	1969.7	1989.4	2000.5
25°	1846.8	1855.4	1859.1	1873.8	1882.4	1899.7	1909.5	1910.7	1911.9	1930.4	1937.8
27.5°	1746.0	1748.4	1759.5	1776.7	1786.5	1802.5	1821.0	1824.6	1830.8	1855.4	1866.5
30°	1631.6	1639.0	1643.9	1668.5	1682.0	1702.9	1726.3	1734.9	1739.8	1773.0	1786.5
32.5°	1514.8	1517.3	1538.2	1551.7	1567.7	1589.8	1616.9	1632.8	1642.7	1677.1	1696.8
35°	1398.0	1402.9	1420.1	1437.3	1453.3	1475.5	1503.7	1525.9	1543.1	1573.8	1599.6
37.5°	1291.0	1303.3	1307.0	1324.2	1336.5	1358.6	1378.3	1410.3	1427.5	1459.5	1492.7
40°	1195.1	1198.8	1201.3	1218.5	1227.1	1248.0	1276.3	1297.2	1320.5	1343.9	1383.2
42.5°	1100.4	1102.9	1106.6	1116.4	1126.3	1141.0	1161.9	1182.8	1207.4	1241.8	1267.7
45°	1013.1	1015.6	1018.1	1024.2	1032.8	1046.3	1059.9	1074.6	1099.2	1128.7	1155.8
47.5°	932.0	936.9	936.9	938.1	944.3	955.4	965.2	983.6	997.2	1013.1	1043.9
50°	854.5	858.2	859.5	859.5	863.1	870.5	873.0	885.3	897.6	912.3	934.5
52.5°	782.0	782.0	780.8	785.7	785.7	790.6	791.8	799.2	807.8	823.8	833.6
55°	713.1	713.1	716.8	714.4	714.4	716.8	715.6	716.8	724.2	734.0	742.6
57.5°	646.7	645.5	649.2	646.7	645.5	648.0	650.4	645.5	646.7	656.6	656.6
60°	580.3	581.6	585.3	582.8	582.8	582.8	580.3	577.9	575.4	581.6	584.0
62.5°	527.5	523.8	527.5	523.8	526.2	525.0	522.6	517.6	518.9	516.4	514.0
65°	472.1	472.1	473.4	469.7	472.1	472.1	468.5	467.2	459.9	457.4	451.2
67.5°	424.2	424.2	425.4	423.0	423.0	424.2	420.5	416.8	409.4	405.8	397.1
70°	382.4	382.4	382.4	381.2	381.2	381.2	378.7	373.8	366.4	360.3	349.2
72.5°	344.3	345.5	344.3	344.3	348.0	344.3	340.6	335.7	329.5	317.2	307.4
75°	313.5	314.8	313.5	313.5	313.5	312.3	311.1	303.7	296.3	286.5	271.7
77.5°	286.5	286.5	287.7	286.5	286.5	285.3	281.6	275.4	266.8	258.2	241.0
80°	260.7	261.9	263.1	264.4	261.9	260.7	257.0	252.1	241.0	231.2	213.9
82.5°	242.2	241.0	242.2	243.5	241.0	239.8	236.1	229.9	221.3	207.8	190.6
85°	223.8	222.5	222.5	223.8	222.5	220.1	216.4	210.3	201.6	188.1	170.9
87.5°	205.3	206.6	207.8	206.6	205.3	202.9	199.2	193.0	183.2	172.1	153.7
90°	191.8	191.8	191.8	191.8	190.6	188.1	184.4	177.1	168.4	154.9	138.9
92.5°	179.5	179.5	179.5	179.5	178.3	174.6	170.9	164.8	154.9	141.4	126.6
95°	167.2	168.4	167.2	167.2	164.8	163.5	157.4	151.2	142.6	129.1	113.1
97.5°	153.7	154.9	153.7	153.7	152.5	150.0	146.3	138.9	130.3	118.0	103.3
100°	143.9	143.9	142.6	142.6	141.4	138.9	134.0	127.9	119.3	107.0	92.2
102.5°	132.8	134.0	132.8	132.8	130.3	127.9	124.2	118.0	109.4	97.1	83.6
105°	124.2	124.2	123.0	123.0	120.5	118.0	114.3	107.0	99.6	88.5	75.0
107.5°	115.6	115.6	114.3	114.3	111.9	109.4	104.5	98.4	91.0	79.9	67.6
110°	107.0	107.0	107.0	105.7	103.3	99.6	95.9	89.8	82.4	72.5	60.2





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	100.8	99.6	98.4	97.1	94.7	92.2	87.3	81.2	73.8	65.2	54.1
115°	92.2	92.2	91.0	89.8	87.3	83.6	79.9	75.0	67.6	57.8	48.0
117.5°	84.8	84.8	83.6	82.4	79.9	76.2	72.5	67.6	60.2	51.6	43.0
120°	77.5	77.5	76.2	75.0	72.5	68.9	66.4	60.2	54.1	45.5	38.1
122.5°	71.3	70.1	70.1	67.6	66.4	62.7	59.0	54.1	48.0	40.6	33.2
125°	63.9	63.9	62.7	61.5	60.2	56.6	52.9	48.0	41.8	35.7	29.5
127.5°	57.8	57.8	56.6	55.3	54.1	50.4	46.7	43.0	36.9	30.7	24.6
130°	51.6	51.6	50.4	49.2	48.0	44.3	41.8	36.9	32.0	27.1	20.9
132.5°	46.7	46.7	45.5	44.3	41.8	39.3	36.9	32.0	28.3	23.4	18.4
135°	41.8	40.6	40.6	39.3	36.9	34.4	32.0	28.3	23.4	19.7	14.8
137.5°	36.9	35.7	34.4	33.2	32.0	29.5	27.1	24.6	20.9	16.0	12.3
140°	32.0	30.7	30.7	29.5	27.1	25.8	23.4	19.7	17.2	13.5	9.8
142.5°	27.1	27.1	25.8	24.6	23.4	22.1	19.7	17.2	13.5	11.1	7.4
145°	23.4	22.1	22.1	20.9	19.7	17.2	16.0	13.5	11.1	8.6	6.1
147.5°	18.4	18.4	18.4	17.2	16.0	14.8	13.5	11.1	8.6	6.1	3.7
150°	14.8	14.8	14.8	13.5	12.3	11.1	9.8	8.6	6.1	3.7	2.5
152.5°	12.3	12.3	11.1	11.1	9.8	8.6	7.4	6.1	3.7	2.5	2.5
155°	8.6	8.6	8.6	7.4	7.4	6.1	4.9	3.7	2.5	2.5	2.5
157.5°	6.1	6.1	6.1	4.9	4.9	3.7	3.7	2.5	2.5	2.5	2.5
160°	3.7	3.7	3.7	3.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3	2235.3
2.5°	2220.6	2219.3	2229.2	2229.2	2218.1	2235.3	2253.8
5°	2213.2	2212.0	2221.8	2221.8	2212.0	2229.2	2248.8
7.5°	2198.4	2199.7	2209.5	2212.0	2199.7	2215.6	2236.5
10°	2182.4	2181.2	2192.3	2194.7	2184.9	2199.7	2219.3
12.5°	2156.6	2156.6	2167.7	2171.4	2161.5	2178.8	2197.2
15°	2129.6	2129.6	2137.0	2143.1	2134.5	2150.5	2168.9
17.5°	2095.1	2093.9	2101.3	2108.7	2100.1	2117.3	2137.0
20°	2050.9	2050.9	2059.5	2068.1	2062.0	2077.9	2100.1
22.5°	2004.2	1999.2	2014.0	2020.1	2016.5	2032.4	2054.6
25°	1945.1	1943.9	1958.7	1967.3	1962.4	1979.6	1999.2
27.5°	1881.2	1880.0	1894.7	1905.8	1903.3	1919.3	1941.5
30°	1803.7	1809.9	1823.4	1841.9	1835.7	1852.9	1876.3
32.5°	1722.6	1728.7	1744.7	1764.4	1765.6	1779.2	1802.5
35°	1625.5	1641.4	1652.5	1678.3	1683.3	1696.8	1721.4
37.5°	1523.4	1541.9	1565.2	1584.9	1594.7	1605.8	1634.1
40°	1409.1	1436.1	1461.9	1485.3	1497.6	1508.7	1535.7
42.5°	1305.8	1326.7	1351.3	1374.6	1396.8	1406.6	1434.9
45°	1189.0	1213.6	1235.7	1264.0	1286.1	1297.2	1325.5
47.5°	1074.6	1099.2	1128.7	1148.4	1171.8	1182.8	1209.9
50°	965.2	987.3	1011.9	1035.3	1055.0	1064.8	1088.1
52.5°	857.0	880.4	903.7	918.5	939.4	946.8	966.4
55°	761.1	777.1	798.0	806.6	827.5	832.4	845.9
57.5°	668.9	679.9	687.3	702.1	716.8	727.9	743.9
60°	585.3	590.2	595.1	603.7	616.0	619.7	625.8
62.5°	510.3	509.0	518.9	521.3	522.6	534.9	528.7
65°	443.9	445.1	436.5	432.8	437.7	441.4	438.9
67.5°	388.5	381.2	373.8	365.2	357.8	361.5	357.8
70°	334.4	328.3	316.0	303.7	298.8	291.4	287.7
72.5°	291.4	276.6	264.4	248.4	239.8	231.2	225.0
75°	258.2	237.3	220.1	202.9	190.6	178.3	175.8
77.5°	223.8	204.1	184.4	166.0	147.5	134.0	129.1
80°	196.7	178.3	154.9	132.8	113.1	95.9	89.8
82.5°	172.1	152.5	129.1	105.7	83.6	65.2	57.8
85°	151.2	130.3	107.0	83.6	61.5	41.8	32.0
87.5°	135.3	111.9	88.5	66.4	43.0	23.4	12.3
90°	120.5	98.4	76.2	52.9	30.7	12.3	0.0
92.5°	107.0	86.1	63.9	43.0	23.4	7.4	1.2
95°	94.7	76.2	54.1	34.4	17.2	4.9	1.2
97.5°	84.8	66.4	46.7	28.3	13.5	3.7	1.2
100°	76.2	57.8	40.6	23.4	11.1	2.5	1.2
102.5°	67.6	51.6	34.4	19.7	8.6	1.2	1.2
105°	60.2	45.5	29.5	17.2	7.4	1.2	1.2
107.5°	54.1	40.6	25.8	14.8	4.9	1.2	1.2
110°	48.0	34.4	22.1	12.3	3.7	1.2	1.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	43.0	30.7	19.7	9.8	2.5	1.2	1.2
115°	38.1	27.1	17.2	8.6	2.5	1.2	1.2
117.5°	33.2	23.4	14.8	6.1	1.2	1.2	1.2
120°	29.5	20.9	12.3	4.9	1.2	1.2	1.2
122.5°	25.8	17.2	9.8	3.7	1.2	1.2	1.2
125°	22.1	14.8	8.6	2.5	1.2	1.2	1.2
127.5°	18.4	12.3	6.1	2.5	1.2	1.2	1.2
130°	16.0	9.8	4.9	1.2	1.2	1.2	1.2
132.5°	13.5	7.4	3.7	1.2	1.2	1.2	1.2
135°	11.1	6.1	2.5	1.2	1.2	1.2	1.2
137.5°	8.6	4.9	2.5	1.2	1.2	1.2	1.2
140°	6.1	3.7	1.2	1.2	1.2	1.2	1.2
142.5°	4.9	2.5	1.2	1.2	1.2	1.2	1.2
145°	3.7	2.5	1.2	1.2	1.2	1.2	1.2
147.5°	2.5	2.5	2.5	2.5	1.2	1.2	1.2
150°	2.5	2.5	1.2	1.2	2.5	1.2	1.2
152.5°	2.5	1.2	1.2	1.2	2.5	1.2	1.2
155°	2.5	2.5	2.5	2.5	2.5	2.5	1.2
157.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5
160°	2.5	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)